

1. A pharmaceutical analyst who is working in the quality control unit of a pharmaceutical industry was testing the quality of a batch of a drug for its safety and efficacy. After acquiring a representative sample, he weighed 0.5 gm of the drug and dissolved it with 30 ml of 0.1M NaOH. The excess NaOH was determined by 0.1M HCl and consumed 3ml to reach the end point. Assuming 1;1 reaction, molecular weight of the drug is 180gm/mol, and acceptance criteria set by USP is [95, 102]. What is the most likely percentage of the drug in the formulation and decision on its quality?

- a.91.2percent; rejected
- b.100.2percent; accepted
- c.97.2percent; accepted
- d.94.2percent; rejected

2. A 49-year- old female diabetic patient came with a prescription of Metformin 500mg po BID for one month. In the process of dispensing, the pharmacist noticed that the patient does not want to take oral medications. As there is no other dosage form for the drug in the pharmacy, the pharmacist tries to coerce her to take the medication as instructed. What is the most likely ethical principle violated by the pharmacist?

- A.Autonomy
- b.Non-maleficence
- c.Beneficence
- d.Justice

3. The head of a pharmacy unit in a general hospital with resource constraints wants to institute effective staff motivation strategies that will improve service quality and workers satisfaction. What kind of motivation strategy is most successful in this situation?

- a.Inviting motivational speakers
- b.Salary adjustment for all staff
- c.Performance-based incentive plans
- d.Political pressures on staff

4.As per the Integrated Pharmaceuticals Logistics System (IPLS) of Ethiopia, the maximum and minimum months of stock of pharmaceuticals for public health facilities are four and two months of stocks respectively. A hospital drug supply manager reported the average monthly consumption of Amoxicillin 500mg capsules, is 500 strips. Currently, 3000 strips of the medication are available in the store. What is the most appropriate stock status Amoxicillin 500 mg indicating?

- a.Under stocked



- b. Over stocked
- c. Optimally stocked
- d. Deadly stocked

5 A pharmacist has purchased Oxytocin, Diazepam, Amoxicillin, and Anti-D from Ethiopian pharmaceutical supply agency. What is the most appropriate shipment condition?

- a. Cold box for Diazepam and Ant-D
- b. Cold box for Diazepam and Oxytocin
- c. Cold box for Amoxicillin and Diazepam
- d. Cold box for Oxytocin and Anti-D

6. A study on four different treatment options of a rare form of cancer reported the following information. Option A was more expensive and less effective than the rest while Option B was less expensive and more effective than the rest and Option C was more expensive than D and more effective than options A and D while Option D was less expensive than A and C and more effective than A. The authors concluded that a dominant option was identified in the study. Which option is most likely to be dominant?

- a. Option "A"
- b. Option "C"
- c. Option "D"
- d. Option "B"

7. A general practitioner requested a drug information service pharmacist at 9:00 AM as "Which crystalloid is important to use for a patient with burn case?" The pharmacist formulated his responses very well and forwarded it at 11:00 AM through email as requested. After three days, the pharmacist called and asked the physician whether his information was relevant. The physician told him that his recommendation did not bring a response rather his patient is in metabolic acidosis. At this time, the pharmacist told him to change it to RL after thorough systematic search. What is the most likely reason for the pharmacist to call the physician?

- a. He is interested to obtain background information
- b. He has to be sure whether the information provided is delivered to the requestor
- c. He is performing follow-up on the outcome of the information provided
- d. He is interested to present the conflicting data to the requestor

8. A medical store head has recorded the currently purchased pharmaceuticals on a transaction record. While receiving, the store head categorized the items as medical supplies, medical equipments and medicines. What is the most likely transaction record used by the pharmacist?

- a. Model 20/1
- b. Model 22/1
- c. Model 6/1
- d. Model 19/1

9. A patient with urinary tract infection came to a pharmacy with prescription of Nitrofurantoin 100mg PO BID. The pharmacist who is working in counseling area has provided education for the patient on the side effect of the current medication. What is the most appropriate source of information used by the pharmacist?

- a. Journal articles
- b. Micromedex
- c. Pharmacotherapy books
- d. Embase database

10. A pharmaceutical scientist prepared a new drug substance in aqueous solution form. The product is directly administered to the blood stream and results in rapid and predictable clinical effect. What are the most likely routes of administration used?

- a. Intra-articular and intracardiac injections
- b. Intraspinal and intradermal injections
- c. Intravenous and intra-arterial injections
- d. Intramuscular and subcutaneous injections

11. A pharmacist is assigned as manager of a hospital medical store. The pharmacist wanted to assign the proper storage condition for medicines, such as ciprofloxacin

tablets, dextromethorphan syrup, prenatal capsules and multivitamin capsules. What is the most appropriate storage condition for the listed pharmaceuticals?

- a. Hot temperature
- b. Cool temperature
- c. Cold temperature
- d. Room temperature

12. A regulatory officer who is working in national drug regulatory authority came across a medicine dossier application for ciprofloxacin tablet. A shelf life of three years and different stability study data were proposed for the drug by the applicants. The regulatory officer wanted to ascertain the proposed shelf life of the drug. What is the most appropriate stability study data to be reviewed in the above case?

- a. Photo stability testing data
- b. Long term stability testing data
- c. Stress stability testing data
- d. Accelerated stability testing data

13. A pharmacist working in a referral hospital warehouse received diazepam and morphine injection. What is the most appropriate storage condition for these products?

- a. In a separate locked cabinet at room temperature
- b. In a separate room near the pharmacy head's office
- c. In a refrigerator between +8 degree centigrade and +15 degree centigrade
- d. In a clean and dry area at room temperature

14. A professional, who works in a pharmaceutical company, is found engaged in activities contrary with the objective of the certificates of competency of the pharmacist. What is the most appropriate measure to be taken in this case?

- a. Revoke certificate of competency
- b. Write a warning letter to the company
- c. Give oral warning to the medical representative
- d. Cancel professional practice registration

15. A pharmaceutical fund and supply agency wanted to procure pharmaceutical products from potential suppliers. The agency invited all local and international suppliers to participate in the tender. What kind of procurement method is applied by the agency?

- a. Restricted tender
- b. Direct tender
- c. Competitive negotiation
- d. Open tender

16. A researcher is interested to assess health related quality of life and its associated factors among patients with heart failure disease using a visual analog scale which ranges from 0 (the worst health state) to 100 (the best imaginable health state). Which central tendency measurement is most appropriate for this outcome variable?

- a. Weighted mean
- b. Harmonic mean
- c. Arithmetic mean
- d. Geometric mean

17. In an institutional annual meeting, the CEO of a hospital tells to the professionals about the importance of collaborative environment. The CEO states that collaboration between health professionals should be an area of mutual interest. What is the most important mutual interest for the hospital staff?

- a. Efficient use of budget
- b. Provision of all diagnostic tests
- c. Satisfactory patient care
- d. Provision of all medicines

18. A store keeper working in a health center sets maximum month of stock of three months, emergency order point of one month and a monthly review period. The consumption pattern of Ceftriaxone injection was 200, 100 and 300 packs in the last three consecutive months. No stock outs were reported in the review period and the stock on hand is 400 packs. How much Ceftriaxone injections need to be ordered at end of the month?

a.400 packs

b.200 packs

c.300 packs

d.100 pack

19. Bottled gas or kerosene powers refrigerators; alcohol; and power bunsen burners are among the pharmaceuticals that need special storage conditions. What is the most likely reason that necessitates the special storage conditions?

a.Because they are Cytotoxic

b.Because they are Flammable

c.Because they are Bulky

d.Because they are Controlled Substances

20.A community pharmacist usually gives free measurements of blood pressure, weight, and blood sugar level and waist circumferences for willing customers and keeps records. The pharmacist found that the blood pressure of one of his customers is 165/100 mmHg up on repeated measurements on several occasions. What is the next most appropriate step the pharmacist should take for this customer?

a.Counsel the customer to see a physician and get appropriate treatment

b.Assess the customer for other co-morbidities and give appropriate drugs

c.Counsel the customer to reduce salt and do physical activities

d.Counsel the customer to reduce sugar consumption and quit smoking

21 Ethiopian Food and Drug Administration Authority accepted a certain company application for renewal of license. The officer working under the inspection and licensing directorate was tasked to evaluate the applicant's document. Upon examining the document, the officer noticed that the company's trade license has passed its' due date. What will be the most appropriate feedback of the officer?

a.Advise the client to renew its trade license

b.Advise the client pay for the renewal service

c.Advise the client to withdraw the application

d.Advise the client to submit another application

22 . Ethiopian Food and Drug Administration received a series of quality defect reports on a particular food product from customers. The authority conducted quality test on the product sample and verified the existence of serious quality defects. What is the most appropriate next step in the management of this case?

- a. Advise timely consumption of the product
- b. Plan to inspect the manufacturing plant
- c. Promote the reprocessing of the product
- d. Recall of the product from the market

23. A researcher wants to study health professionals' job satisfaction among a public hospital. The hospital has 500 employees and the researcher needs to conduct a short survey. She decides that 100 samples employees are sufficient for the study. Which sampling technique is the best and appropriate for this study?

- a. Simple random sampling
- b. Systematic sampling
- c. Stratified random sampling
- d. Cluster sampling

24. A hospital pharmacy department reported that the time between new stocks are ordered and received to be used is 15 days. What is the most likely key performance indicator that the department reporting?

- a. Delivery time
- b. Transportation time
- c. Lead time
- d. Procurement time

25. A pharmacist, who is working in a hospital pharmacy store, received a pharmaceutical product from a local supplier. While checking the manufacturer's recommended storage condition, no specific instruction was written on the label. What is the most likely appropriate storage condition for this product?

- a. In a dry, well-ventilated premises at To of +15 to 250 C
- b. In a dry, well-ventilated premises at To of +25 to 400 C
- c. In a dry, well-ventilated premises at To of +2 to 80 C
- d. In a dry, well-ventilated premises at To of +8 to 150 C

25. The drug and therapeutic committee requested a pharmacist to determine drugs for urinary tract infections (UTIs) to include in the hospital formulary. The pharmacist found ten drugs indicated for UTIs and recommended ciprofloxacin, norfloxacin, and

doxycycline. On review of the formulary, a physician raised a concern that the medications are not comprehensive and cannot be used in the treatment of UTI for pregnant patients. What is the most important concern raised by the physician on this formulary?

- a. The formulary does not consider the cost of the drugs
- b. The formulary does not consider the special populations
- c. The formulary does not consider appropriate formulations
- d. The formulary does not consider dosing of these drugs

26. A pharmaceutical industry has been preparing coated tablet from for moisture sensitive dabigatranetexilate. What unique packaging system should be used for this drug?

- a. Store in cool temperature
- b. Store in refrigerator
- c. Pack in normal container
- d. Copackage with desiccant

27. A hospital plans to purchase 10,000 cartons of disposable glove with a reasonable price. A market assessment indicates that there are a number of suppliers to purchase from. What is most appropriate procurement method to be used in this case?

- a. Competitive negotiation
- b. Direct procurement
- c. Open tender
- d. Restricted tender

28. In the process of compounding pharmaceuticals, pharmacists are expected to wear goggles, head covers and fully covered shoes. What is the most likely reason for suggesting goggles?

- a. To prevent product contamination
- b. To appear more professional
- c. To protect from danger of spillage
- d. To prevent contamination by tears

29. A pharmacist who is working in the community pharmacy dispensed Albuterol suspension packed in the pressured device. What is the most likely packaging device?

a.Ophthalmic

b.Transdermal

c.Intrauterine

d.Nebulizer

30.A local pharmaceutical distributor company is involved in the distribution of different products like antihypertensive, anti-diabetic, antibiotics and oral contraceptives. What is the most likely product in the above list to be promoted by electronic media?

a.Antibiotics

b.Oral contraceptives

c.Antihypertensive

d.Anti-diabetic

31.A hospital pharmacist was storing pharmaceuticals, such as tablets, BCG vaccine, amoxicillin syrup and liquid alcohol. The pharmacist wants to separate pharmaceuticals that need controlled environment for storing. Which of the pharmaceuticals are most likely to be stored in a controlled environment?

a.Diazepam, liquid alcohol and amoxicillin syrup

b.BCG vaccine, diazepam tablets and liquid alcohol

c.BCG vaccine, amoxicillin syrup and liquid alcohol

d.Diazepam tablets, BCG vaccine and amoxicillin syrup

32. A pharmacist conducted antibiotic drug use evaluation and found that most patients were on Ceftriaxone though they can also be treated with other antibiotics like ciprofloxacin. The pharmacist wants to encourage the use of ciprofloxacin that

will be expiring in two months unless utilized. What is the most appropriate way to disseminate the information?

- a. Develop drug bulletin and publish it in appropriate journal
- b. Attend morning session and give them verbal information
- c. Collect email of the prescribers and send them by email
- d. Receive phone number of the prescribers and call them

33. A pharmacist who is working in a hospital pharmacy store received new products with shorter expiry dates than products received six months ago. What will be the most appropriate storage principle for the new products?

- a. Last in first out approach
- b. First expired first out (FEFO) approach
- c. Last expired first out approach
- d. First in first out (FIFO) approach

34. A healthcare provider wants to administer quinine by mixing in 500 ml normal saline solution to an unconscious patient with malaria. What is the most appropriate route of administration?

- a. Subcutaneous
- b. Intramuscular
- c. Intravenous
- d. Intradermal

35. A pharmacist wanted to provide health education regarding the necessity of medication adherence for ART patients. What is the most appropriate health education method for this case?

- a. Group discussion
- b. Mass media education
- c. Individual counseling
- d. Home to home visits

36. According to 'WHO' "Essential medicines are indispensable and necessary for health needs of the population." Ethiopia has prepared a list of essential medicines to

be used as a guide for professionals working in the health sector. The Ministry of Health reported that communicable disease is still a major concern. Which group of medicines should be included in the national Essential Medicine List?

- a. Anti-Infective
- b. Anti-Hypertensive
- c. Anti-Asthma
- d. Anti-Lipedemia

37. According to the Ethiopian national drug policy, ensuring the availability of essential medicines at an affordable price is a priority. This is in line with WHO recommendation on the objectives of a national drug policy. What WHO objective is in line with Ethiopia's national drug policy in this scenario?

- a. Access
- b. Product safety
- c. Quality
- d. Rational use

38. A bed-ridden male patient who is suffering from a very severe cancer pain requested a medication that assisted death. The physician confirmed that the patient has no probability of survival and prescribed a potent drug that can assist the patient's life to end. What should the pharmacist do?

- a. Refuse to dispense the medication
- b. Dispense with the patient's verbal consent
- c. Dispense with patient's written consent
- d. Request the physician's written consent

39. A pharmacist working in a primary hospital has developed a list of essential medicines and submitted it to the drug and therapeutic committee (DTC) for an approval. The list includes antibiotics, cardiovascular and anti-cancer medications among others. After reviewing, the DTC rejected the anti-cancer drug. What is the most likely reason of rejection of the drug?

- a. Quality of medicines
- b. Level of services provided
- c. Relevance of diseases

d.Safety and efficacy

40.A pharmacist working in a hospital medical store received products that were labeled; "keep at room temperature". The pharmacist wanted to indentify the appropriate temperature condition based on the label. What is the most appropriate temperature condition for these products?

a.25-30 degree centigarde

b.15-25 degree centigarde

c.8-15 degree centigarde

d.4-8 degree centigarde

41.To facilitate rational selection of key medicines at a general hospital, the drug and therapeutic committee has developed a document containing the hospital specific medicine's list. What is the likely category of the document?

a.National drug formulary

b.Essential medicine list

c.The formulary manual

d.Standard treatment guideline

42. Pharmaceutical companies arrange dedicated storage facilities for the products that they manufacture. Different drug products require different conditions of storage based on types of dosage forms or nature of the active drug. What is the significance of dedicating storage condition to products?

a.Easing identification of one product from the other

b.Preventing products mix-ups and contamination

c.Facilitating smooth movement in the store

d.Maintaining the stability of products

43.A male pharmacist working in mini-laboratory has prepared cocoa base, glycerin suppositories and glycerinated gelatin suppositories. After packing the product with appropriate material, he put the recommended storage temperature on the label. What is the most important property that determines the storage temperature in this case?

a.Viscosity

- b.Melting point
- c.Hydroscopicity
- d.Water solubility

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45.A pharmacist, who works in a hospital pharmacy compounding room, has prepared photosensitive drug in solution forms. The pharmacist is now searching for primary container. What is the best container for this preparation?

- a.Flint glass
- b.Amber glass
- c.Colorless glass
- d.White bottle

46.For a pharmacist, who is an employee in certain pharmaceutical industry, his job description is as follows; He has the responsibility and authority to approve or reject all components, drug product containers, closures, in-process materials, packaging material, labeling, and drug products, and the authority to review production records to assure that no errors have occurred or, if errors have occurred, that they have been fully investigated. What is the most likely unit of the pharmaceutical industry that the pharmacist is assigned?

- a.Manufacturing department
- b.Engineering department
- c.Quality control department
- d.Material handling department

47. A community pharmacist has a frequent client who is a 60-year-old man. Previously, the client was diagnosed with pneumonia and took a three day course of the oral antibiotic-Azithromycin 500mg. After getting cured from the disease, the

client always comes to the pharmacy and asks for Azithromycin when he develops cough or fever. The pharmacist is concerned that the client is abusing the medicine. What would be the most likely risk of abusing antibiotics?

- a. Nausea and vomiting
- b. Drug dependency
- c. Fever and rashes
- d. Drug resistance

48. pharmaceutical company wanted to study the effect of a new anti-hypertensive drug on patients' blood pressure level. Which data collection method is most suitable for this study?

- a. Interview
- b. Document review
- c. Observation
- d. Biological measures

49. Researchers at Addis Pharmaceutical Factory Research and Development Unit started designing and developing Omeprazole in pellet form. They developed all the production processes and started searching for a holder of pellets for each dose. What is the most appropriate holder of each dose in this case?

- a. Capsule
- b. Blister
- c. Vial
- d. Bottle

50. A 44-year-old man was on Methotrexate 7.5mg PO three times weekly for the treatment of gout arthritis for the last three months. Currently, he noticed the thinning of his hair and came to ambulatory clinic to know if this might be drug related. What would be the most relevant tertiary source of information for responding to this query?

- a. American Drug Index
- b. Stockley's Drug Interactions
- c. Handbook of Non-prescription Drugs
- d. Meyler's Side Effects of Drugs

51. researcher, who is working at a human resource department of a university, is interested to know attitude and perception of the university's former students on use of contraceptives methods. The researcher has planned to collect data through correspondence. What data collection tool is most appropriate for this study?

- a.Document analysis
- b.Questionnaire
- c.Interviews
- d.Observations

52. In an orientation of newly hired pharmacists, the head of a hospital pharmacy asked one of the pharmacists to define non-maleficence. What would be the most appropriate response from pharmacists?

- a.Do not hate
- b.Do no good
- c.Do no harm
- d.Treat individuals equally

53. A health care provider requested the availability of a particular drug product in the hospital from drug information center. The pharmacist has checked the availability of required drug in the pharmacy store. What is the most relevant information required to provide immediate response in this case?

- a.Telephone number
- b.Fax number
- c.E-mail address
- d.Location of the requestor

54. A pharmacist was instructed by a hospital pharmacy medicine disposal team to implement the decisions on disposal of each category of pharmaceuticals. The pharmacist learned that the team decided "To be disposed in a sewer" as a disposal method of certain pharmaceutical products. What is the most likely category of this pharmaceutical waste?

- a.Solid dosage forms
- b.Semisolid dosage forms

c.Liquid dosage forms

d.Powder dosage forms

55. It is an obligation to treat all clients in an equal and fair way. Appropriate decision should be made based on client need and fair distribution of resources. It would be inappropriate to make such decision based on how much he or she likes each client. This is one of the ethical principles that a pharmacy professionals should abide by. What ethical principle is best described in this case?

a.Justice

b.Non-maleficence

c.Fidelity

d.Veracity

56.A pharmacist was working in a hospital pharmacy and compounded a cough syrup having expiry date of 30 days on March 01, 2019. What is the most appropriate way of labeling this product?

a.Use after March 31

b.Use for 30 days

c.Use for a month

d.Discard after 30 days

57 A drug promoter comes to an institute and advertizesa product on his hand. At the end of his promotion, he provided a free gift sample to the institute as a promotion aid that does not clearly indicate by whom it was sponsored. What core promotion principle the promoter failed to follow?

a.Transparency of promotion

b.Appropriate use

c.Local regulation

d.Base of interaction

58.A certain pharmaceutical manufacturer filled an application for renewal of the license to the regulatory authority. A team of regulatory experts, who are working under licensing and inspection directorate, were assigned to handle the case. What activities will the experts do?

a.Fill-in the application and grant renewal

- b. Check validity of good manufacturing practices certificate
- c. Contact the company management to give their advise
- d. Accept a bribe to grant the license

59. A pharmacist was requested to evaluate an article that compares the effectiveness of Pantoprazole with ranitidine for peptic ulcer diseases. In the method section of the article investigators mentioned the use of randomization technique during study participant recruitment. What would be the justification for randomization of the study participants in this article?

- a. To minimize type II error
- b. To minimize type I error
- c. To minimize measurement bias
- d. To minimize selection bias

60. A pharmacist working in a hospital wanted to reconcile pharmaceuticals using an inventory control techniques. The pharmacist wanted to arrange the pharmaceuticals based on the level of criticality or importance. What is the most appropriate technique to be used by the pharmacist?

- a. ABC Analysis
- b. FSN Analysis
- c. STO Analysis
- d. VEN Analysis

61. A pharmaceutical researcher designed new dosage form for insulin. Following its administration, the drug was metabolized in the liver with no therapeutic effect. What was the route of administration used?

- a. Parenteral
- b. Oral
- c. Inhalation
- d. Vaginal

62. A pharmaceutical researcher is designing a packaging material for ophthalmic formulation, fluocinolone acetonide intravitreal implant for treating chronic diabetic macular oedema. What appropriate requirement should the packaging material fulfill?

- a. May not contribute for product stability
- b. Offers difficulty of administration to the patient
- c. Must ensure sterility during entire shelf life
- d. Compatible with drug, but may not with excipient

63. A pharmacist working in a hospital pharmaceuticals purchasing department was asked for advice on ways to improve the affordability of medicines in the hospital. The pharmacist immediately noticed that most of the products were purchased from very few wholesalers which were supplying branded products. The hospital is allowed to purchase medicines independently. What would be the most appropriate action for the above scenario?

- a. Using open tender for suppliers with branded products
- b. Using open tender procurement by generic name
- c. Giving special focus for locally manufactured medicines
- d. Encouraging the patients to be included in a health insurance scheme

64. A pharmaceutical industry manufactures a drug product, which is sensitive to UV light. This drug product is also hygroscopic. The industry selected a suitable packaging material for this product. What property of the selected packaging material is most important for this product?

- a. Safety
- b. Compatibility
- c. Protection
- d. Performance

65. A 58-year-old female patient came to a hospital pharmacy with a prescription. Upon checking the prescription, the pharmacist noticed that the quantity for one of the medicines is incorrectly high. Talking to the patient, the pharmacist suspected that the patient might be manipulating the quantity prescribed from her non-verbal cues. What is the most likely reason for the pharmacist's suspicion?

- a. Patient's projected voice
- b. Patient's open posture
- c. Patient tested on polygraph
- d. Patient's lack of eye-contact

66. A pharmaceutical chemist is planning to check the sterility of a parenteral product, which is ready for release. The product is claimed to contain antimicrobial agents. The pharmaceutical chemist is selecting a suitable sterility testing method. What is the most appropriate sterility testing method for this product?

- a. Membrane filtration method
- b. Pour plate method
- c. Immersion method
- d. Direct inoculation method

67. A 29-year-old frequent customer of a community pharmacy asked for amoxicillin 500mg capsules without presenting a prescription. The customer complained of coughing and wanted to take the amoxicillin for this condition. The pharmacist knows that amoxicillin is a prescription only medicine. What is the most appropriate action to be taken by the pharmacist?

- a. Dispense the medicine and advise the patient to see a doctor
- b. Dispense a stronger antibiotic instead of amoxicillin
- c. Decline to dispense the medicine without prescription
- d. Dispense the medicine as long as the symptom is convincing

68 A pharmacist in production industry actively works at the preparation, quality control and packaging areas. Provision of the right information to products is very important for identifying each batch of the product that the industry produces. What is the best stage of production that maintains the above issue?

- a.Storing
- b.Preparing
- c.Labeling
- d.Dispensing

69. Since GMP touches on all areas of manufacturing, engineering, quality control, materials handling, warehousing and distribution; it would be essential to provide personnel trainings. New employees may face difficulty in a relatively technical environment. What personnel training are particularly most important for new employees?

- a.Manufacturing personnel
- b.Warehousing personnel
- c.Material handling personnel
- d.Engineering personnel

70 .A pharmaceutical supply importing company wants to promote Albendazole 400mg tablet on a media. What is the most likely information that should be included in the advertisement?

- a.Because it is OTC no need for professional advice.
- b.The products right source of availability should be mentioned.
- c.The product is available in nearby supermarkets.
- d.The product is available in shops because it is safe drug to use.

71 A physician requested a drug information service pharmacist about the dose of Cefazidime. The pharmacist asked the physician for what condition he was planning to prescribe Cefazidime and ensured that the physician wanted to empirically use Cefazidime for cellulitis. What is the most appropriate drug information category of the ultimate question?

- a.Therapy Evaluation/Drug of Choice

b. Identification of the Product

c. Dosing and Administration

d. Pharmacology

72..A pharmaceutical scientist designed a new form of peptide drug which should be administered through a route that bypasses the first pharmacokinetic phase. What would be the most appropriate route of administration for the drug?

a. Buccal

b. Subcutaneous

c. Rectal

d. intravenous

73. A woman frequently comes to a community pharmacy asking for post pill. On further assessment, the pharmacist understands that she has multiple sexual partners and is worried about sexually transmitted disease. What should be the most appropriate advice to address the woman's concerns?

a. To change post pill with implant for long term

b. To change post pill with combined oral contraceptive

c. stop using post pill from now on

d. To use condom during sexual activity

74 .A pharmacist managing the drug supply in a referral hospital plans to forecast the amount of medicines needed for the coming year based on past consumption records. What is the most appropriate source of information to be used in the above case?

a. Stock record

b Bin card

c. Kardex

d. Ledger

75 .Pharmacists are responsible to ensure that the correct medicine is delivered to the right patient, in the correct dosage and quantity with clear instruction and in a package that ensures the potency of the medicine. What role of the pharmacists does this demonstrate?

a. Ensuring good drug supplying practice

b. Ensuring good prescribing practice

c.Ensuring good dispensing practice

d.Ensuring good drug procuring practice

76 .Ethiopian Pharmaceutical Manufacturing Share Company has a plan to start manufacturing 0.9percent w/v sodium chloride, 900 mL. They selected and purchased all raw materials, except primary containers. What is the most appropriate primary container that should be selected in this case?

a.Blister packs

b.Rigid plastic bottles

c.Rigid metal tubes

d.Collapsible plastic bags

77.A researched survey planned to conduct to find out if there is a relationship between gender and health related issues in a district. What would be the first step to be done in this case?

a.Determining the sample size

b.Setting a general objective

c.Undertaking fieldwork

d.Developing assessment tool

78. A community pharmacist wanted to start compounding benzoic acid ointment in the compounding room. Prior to compounding, the pharmacist started developing and documenting the standard operating procedures that will be used during production. What is the most appropriate procedure document that the pharmacist should use?

A.Recording distribution chain after product release

b.Checking the used calculation independently

c.Recording quality of the finished product

d.Preparing specific worksheet and label

79 A certain company wants to plant a new food processing industry in Ethiopian and submitted an application to get license. A team of experts were sent to evaluate the company's readiness to commence the production. Upon their examination the experts

requested for waste handling procedure of the company but the company fails to provide the document. What will be the recommendation of the authority?

- a.Halt the construction of the plant and switch to other sector.
- b.Start the production since the food industry doesn't pose significant risk.
- c.Conduct impact assessment of the environment and prepare risk mitigation strategy.
- d.Promote the company management for the contribution of job creation.

80 A medicine dossier assessor is reviewing product dossier application for a drug. The assessor started from module one and confirmed that documents like certificate of pharmaceutical product, summary of product characteristics, good manufacturing practice certificate and certificate of suitability are attached within the application. The assessor wanted to give attention whether this product is produced consistently and controlled with the quality standard appropriate to the intended use. Which submitted document should be targeted by the assessor in the above case scenario?

- a.Certificate of pharmaceutical product
- b.Summary of product characteristics
- c.Certificate of suitability
- d.Good manufacturing practice certificate

81.A pharmacist who is working at a zonal health department was assigned to inspect the pharmacies in the town. At the beginning of the inspection, the pharmacist explains the rights of the inspector to the owner of the pharmacy. What should be the most reasonable right of the inspector?

- a.Accessing different rooms in the premises
- b.Evaluating affordability of medicines in the pharmacy
- c.Auditing the cash(money) that is collected by the pharmacy
- d.Confiscating personal properties of the employees

82. The selection of packaging material for any pharmaceutical product is as important as proper pharmaceutical dosage form. The manufacturer should consider different factors to guarantee safe and adequate delivery of the drug product. What is the most important factor to consider while selecting packaging materials?

- a. Compatibility and safety concerns
 - b. Literacy and economic status of the consumers
 - c. Test methods applied for quality control
 - d. Pharmacodynamic properties of the drug
- Clear my choice

83. According to the criteria of Ethiopian Food and Drug Administration (EFDA), the location of pharmaceutical manufacturing premises has to conform to a set of regulatory requirements. What is the most acceptable location according to this case scenario?

- a. Premises with one of its production rooms sharing a corridor with a printing press
- b. Premises located away from sites or activities that emit obnoxious materials
- c. Premises located a few meters away from a brewery
- d. Premises in the vicinity of the town sewerage treatment plant

84. A pharmacist visually inspects soft gelatin capsule shell seal thickness and moisture level before and after drying. The results are used as a guide to alter manufacturing process parameters. What is the stage of drug product testing in this case?

- a. In-process
- b. Finished product
- c. Near pre-release
- d. Post release

85. A pharmacist working as a store keeper of a hospital pharmacy found expired products that were labeled "never flush to sewer". The pharmacist saw that the products were in liquid dosage forms. What is the most likely category of the products?

- a. Diluted antineoplastics
- b. Undiluted multi-vitamins

- c.Undiluted normal saline
- d.Diluted anti-pain preparations

86. A hospital has collected Hepatitis B vaccines in order to provide vaccination for frontline health professionals. What is the most appropriate storage condition for the medication?

- a.15-25 degree centigrade
- b.20-25 degree centigrade
- c.8-15 degree centigrade
- d.0-8 degree centigrade

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88. A pharmacist, who is working in a health center, was asked by his manager to use an appropriate stock recording system for products in the medical store. The pharmacist is expected to choose the system that enables easy visual inspection of the products. What is the most appropriate stock recording system that fulfills the requirement?

- a.Bin cards
- b.Stock cards
- c.Ledger
- d.Kardex

89. A pharmaceutical manufacturing company submitted an application for relicensing of its manufacturing plant. The regulatory authority organized a team of experts and sent them to evaluate the manufacturing process of the company. The experts presented a report indicating serious flaws in health status monitoring activities for staff working in parenteral dosage form production line. What is the most appropriate next step in managing the situation?

- a.The authority will advise the company to strengthen its security.
- b.The authority will order the company to do process validation.
- c.The authority will appreciate the company's commitment for quality.
- d.The authority will order the company to adhere to the cGMP principle

90.A pharmacist who is working as a manager of a health center medical store, allocated stocks using alphabetical order by generic name. The pharmacist identified that the weakness of the system is that it needs reorganization of the store in some situations. What is the most likely situation that requires reorganization of the store?

- a.Whenever pharmaceuticals are expired
- b.Whenever pharmaceuticals are issued
- c.Whenever essential medicines list is changed
- d.Whenever stock-out pharmaceutical arrives

91.A pharmacist, who is working in a pharmaceutical supply management, collects information on daily performance using the pharmaceutical management information system (PMIS). The pharmacist records the consumption, prepares reports, and tracks the availability and use of medicines using the system. What is the most likely type of monitoring system that can use data from the PMIS?

- a.Sentinel reporting
- b.Routine reporting
- c.Field supervision reporting
- d.Special Study reporting

92. A healthcare provider wants to administer quinine by mixing with 500ml normal saline solution to unconscious malaria patient. What is the most appropriate route of administration?

- a.Intradermal
- b.Intravenous
- c.Intramuscular
- d.Subcutaneous

93. A pharmacist, who is working in a pharmaceutical industry that manufactures highly sensitizing materials like cytotoxic substances, is expected to assure that the manufacturing takes place in dedicated and self-contained facilities. What is the importance of dedicating production area for such drugs?

- a. The products may be lost by dusting
- b. Prevent cross contamination
- c. Lowers the number of personnel needed for production
- d. Allows economic use space

94. A pharmacist, while he was reviewing patients' chart in wards, identified an empiric antibiotic prescribed for shorter duration. As a result, the pharmacist recommended an adjustment. However, the physician who ordered the medication refused to do so. What should the pharmacist approach be in this particular condition?

- a. Report to the concerned body
- b. Convince the patient first
- c. Agree on average duration
- d. Ask for the reason of refusal

95. A patient was prescribed morphine 30mg per oral as needed for the treatment of lower back pain. The patient uses the medication several times for longer period. What is the most likely risk of the patient in the above case?

- a. Addiction to the medication
- b. Gastric irritation from the drug
- c. Aggravation of the lower back pain
- d. Resistance to Tramadol treatment

96. A medical representative (MR) of a certain pharmaceutical company has prepared printed materials such as brochures, newsletters, posters, stickers, algorithm, anatomical charts, calendar and dosage cards; and distributed to health professionals to induce the prescribing, supply or administration of drugs. What task is most likely performed by the MR?

- a. Persuasion for off-label promotion

- b.Regulation of advertisement of drugs
- c.Health professionals training
- d.Promotion and advertisement of drugs

97. A pharmacist prepared eye drops for treatment of eye infection. What should be the pH of this preparation?

- a.3.2
- b.10.2
- c.7.4
- d.12.0

99 A pharmacist in a pharmaceutical industry is expected to follow the implementation of good packaging and labeling culture of the industry. What is the most important information the label should contain?

- a.The batch number of the product
- b.The quality control tests conducted
- c.The manufacturing procedure implemented
- d.Country where the product is manufactured

100 . A pharmacist, who is working in a hospital medical store, was asked by one of the pharmacy technicians for advice on the proper temperature condition for a product labeled "Store in a refrigerator". The pharmacist wanted to identify the specific temperature range before providing the advice. What is the most appropriate temperature range used to store the product in this case?

- a.0°C to +4°C
- b.0°C to +10°C
- c.2°C to +8°C
- d.0°C to +8°C

98. A clinician at a hospital has checked patients with cancer cases, almost all of whom indicated that they have been exposed to a particular chemical. The clinician hypothesized that the reason for the cancer might be the chemical the patients have been exposed to. What is the best study design to test this hypothesis?

- a. Controlled trial
- b. Case control study
- c. Cross sectional study
- d. Cohort study

